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**Declaration under Rule 4.17:**

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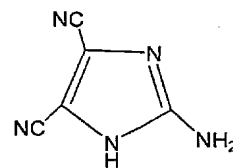
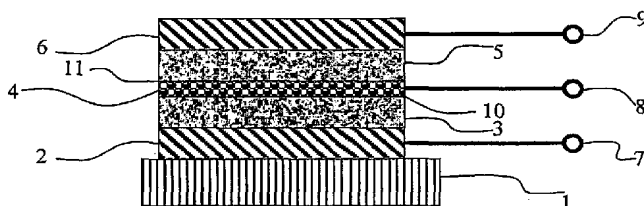
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(54) Title: THREE-TERMINAL ELECTRICAL BISTABLE DEVICES



(57) Abstract: A three terminal electrical bistable device that includes a tri-layer composed of an electrically conductive mixed layer sandwiched between two layers of low conductivity organic material that is interposed between a top electrode and a bottom electrode. The conducting mixed layer serves as the middle electrode. The device includes two memory cells composed of electrode/organic layer/mixed layer, where the interfaces between the electrically conductive mixed layer and the low conductivity organic layer exhibit bistable behavior.